



MT Alliance EFM User Manual

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1 Preface

1.1 Scope of this manual

This document explains the advanced configuration parameters of the **EFM** (Enterprise Facilities Management) Platform. These parameters are located in “.config” files. The **EFM** Platform usually consists of one or more **EFM Workstations**, one **Broker List** and its associated Broker Manager and one **EFM** Core per store.

The computer that runs the **Broker List** is usually a server-grade machine located at the Corporate Supermarket Chain headquarters. On that computer, a network administrator can run the “**Broker List** Configuration Wizard” and the “Broker Manager”. These applications provide a user interface to do just about everything. However, there may be situations that require more fine-tuning. This fine-tuning can be accomplished by manually editing the configuration files and by restarting the associated application or service.

1.2 Conventions used in this manual

For your convenience, several screen captures have been added to illustrate the procedures. Certain images contain numbered balloons to help you locate the corresponding procedure more quickly.

Terms in **Bold** are used to emphasize important points.

2 The EFM Workstation and its utility

General

The **EFM Workstation** is the ultimate management system tool to:

1. Assist a Corporate Supermarket Chain to reduce its operating costs (maintenance and energy)
2. Assure that each individual supermarket of the chain is offering the best quality food to their customers.

The **EFM Workstation** mainframe can be connected simultaneously to several hundreds of supermarkets. The **EFM Workstation** is the main control unit that supervises in **real time** the entire stores portfolio of a Supermarket Corporation. Here is a list of actions that can be carried out using the **EFM Workstation**:

- Management of case temperature alarms (receiving, analyzing, acknowledging and troubleshooting/dispatching alarms);
- Management of sub-systems alarms [Refrigeration, HVAC, Lighting control, Energy Management (receiving, analyzing, acknowledging and troubleshooting/dispatching alarms)];
- Changing set points (T°, Pressure, etc) of a site;
- Sending and ordering load shedding command(s) to a group of selected sites for **Demand Response Energy Programs**;
- Sending and ordering load shedding command(s) to a group of selected sites for Real Time Pricing Management;
- Visualization of historical graphs of any point or sensor of any site;
- Start up of remote control applications (**pcAnywhere, Carbon Copy, Remote Desktop, etc.**) and Web pages;
- Assuring the optimum operation of each site.

The deployment of the **EFM** solution consists of the installation of three (3) major components, as described below:

- The first component is called the "**Core**" and is installed automatically with the **MT Alliance** in each supermarket. Its function is to assure the communication between the **EFM** workstation and the local PC in the store. Of course, it is essential that the **MT Alliance** computer be connected to the intranet of the Corporation to run the **EFM** applications;
- The second component is called the "**Broker List**". The **Broker List** regroups all the stores that are connected to the **EFM Workstation**. The **Broker List** is a Windows service, which starts a **Broker** to establish a connection with a **Core** (thus a **Broker** for each site). Usually, we install only one **Broker List** on a server located in the Corporate Supermarket Chain headquarters. It is possible to deploy more than one **Broker List** when a Corporate Supermarket Chain has thousand of stores.
- The third component is the **EFM Workstation**. It is through the **EFM Workstation** that you can supervise all the stores of your Corporation from your headquarter. There is no limitation on the number of **EFM Workstation** that you can install.

However, there are a maximum of **10 EFM Workstations** that can be connected simultaneously on the same supermarket. The **EFM Workstations** can be installed on the intranet of the Corporation and can also be located outside of the corporate network if a VPN access to the **Broker List** is available.

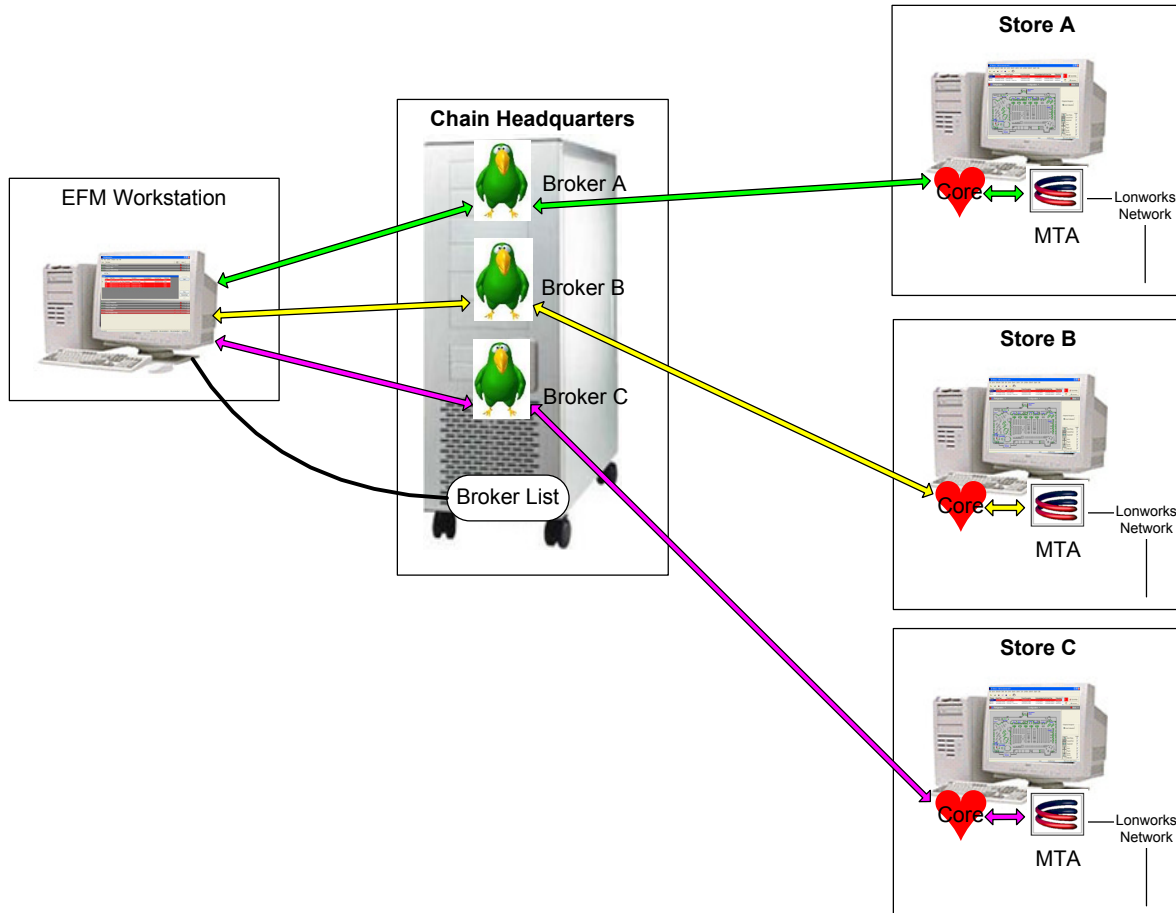


Figure 1 - Representation of the EFM Workstation and its components

The **EFM Workstation** is conceived to operate all the time. It is not conceived to be turned off and on every day. For a 24 hours operation shift, at the quarter change, the new employee enters his account and his password in the **EFM Workstation** and then he can manage the **EFM Workstation** actions without having to enter continuously his password each time he makes an intervention in a store.

The **EFM Workstation** can be parameterized to fill certain specific functions like Energy Management, Food Safety Management and Maintenance Management. Moreover, it is possible to configure the **Broker List** to limit the control and the access given to each **EFM Workstation**. For example, an **EFM Workstation** installed in a refrigeration company could be set up such that it can reach only the sites included in its maintenance contract.

3 The Broker List

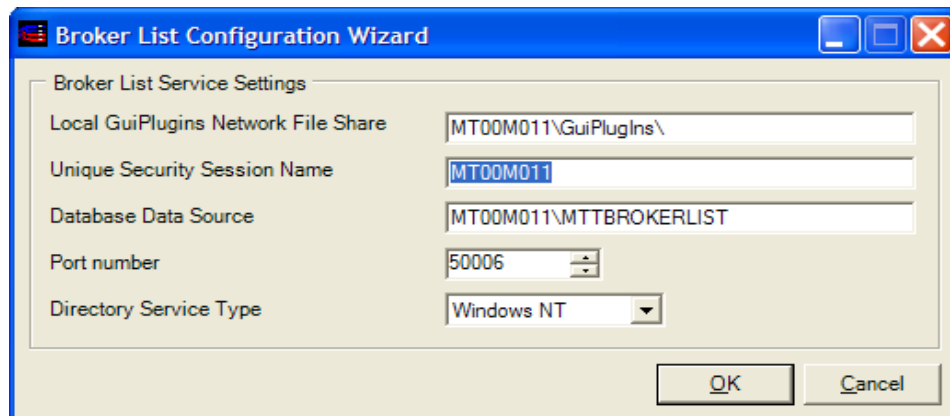
Usually, the **Broker List** is installed on the server at the Corporate Supermarket Chain headquarter and the **EFM Workstation** on another computer. For ends of demonstration, it is possible to install both on the same computer. However, the uninstallation of one of the two applications will affect the other. For the ends of this document, we will assume that three (3) distinct computers are used: one for the **MT Alliance** in the supermarket, one for the **Broker List** and a third one for the **EFM Workstation**. Of course, those three computers must be connected on the intranet of the corporate network.

The normal procedure consists in installing (in that order), the **Core**, the **Broker List** and finally the **EFM Workstation**. As the **Core** is installed automatically with Alliance in each supermarket, we can jump right away onto the configuration steps of the **Broker List**.

3.1 Security Configuration of the Broker List

It is important to install the **Broker List** following the installation procedure included in the CD. Using the computer where you have installed the **Broker List**, start the following **.exe** file:

C:\Program Files\Micro Thermo Technologies\Broker List Service\Broker ListConfig.exe



- **Unique Security Session Name:** Use a name that will permit the network administrator to secure the **Broker List** access. Any **EFM Workstation** which tries to connect on this **Broker List** must provide the good **Security Session Name** otherwise the connection is refused. The **Unique Security Session Name** default value is the computer's name where is installed the **Broker List**. This is an authentication mechanism which protects the access to port 50006;

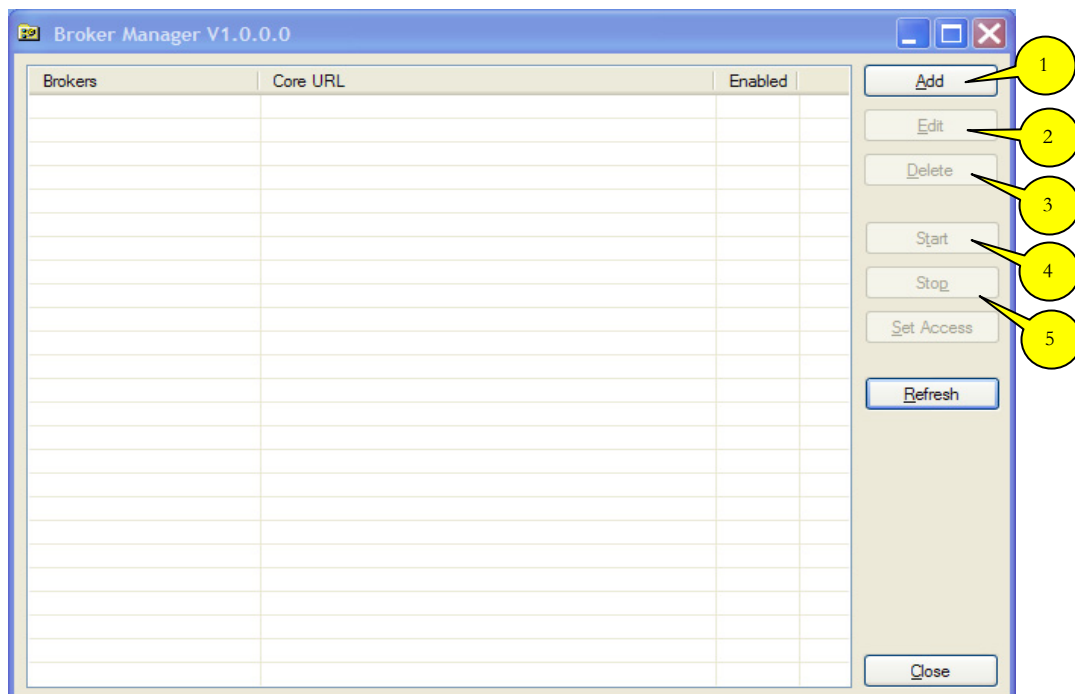
- **Database Data Source:** This is where is located the SQL data base used by the **Broker List**. We are recommending not changing the default value («computer name where the **Broker List** is installed» \ MTTBROKERLIST)
- **Port Number:** Port number on which the **Broker List** listens to accept a new connection coming from a **EFM Workstation**. The same port is used, no matter the number of **EFM Workstation** connected.
- **Directory Service Type:** Choose "Windows NT" to have only the users and groups of the local domain of the **Broker List** computer. Choose "LDAP" to have the users and groups of both, the local and the network domain.

3.2 Configuration of a Site List (Broker List)

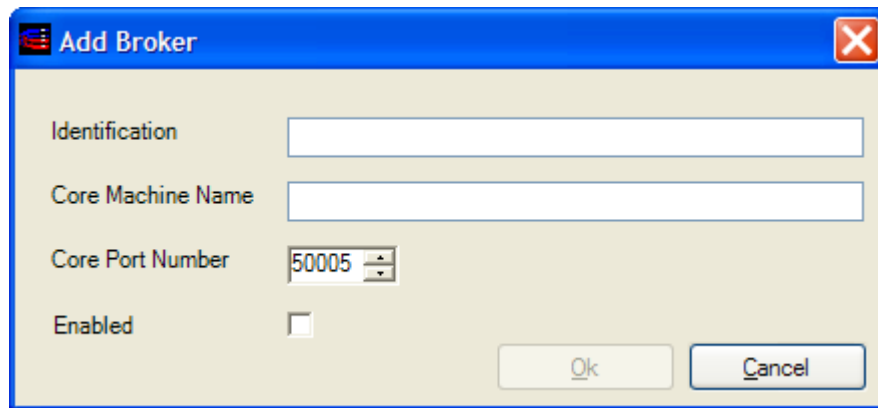
When the security configuration is completed, the first **Broker** can be added. Each **Broker** acts like a communication agent for only one site. The communication between the **Broker** and the **Core** located on the site is bidirectional.

Using Windows Explorer, you start the following **exe** application

C:\Program Files\Micro Thermo Technologies\Broker Manager\BrokerManager.exe



1. For adding a **Broker** in the **Broker List**, click on the **Add** key.



- **Identification:** By entering a descriptive text in this field you temporarily identify the **Broker** to the new site. This name will be preserved until the connection is established with **Core**. Once the communication is established with the **Core**, the actual identification of the site will be used automatically. It is recommended to check initially that the **Customer Name** was registered on the site in the MT Alliance. This can be verified simply by checking the **Customer Name** in the main window of MT Alliance. In this example, we used **Site number 1**.
- **Core Machine Name:** This field makes the association of the new **Broker** to a specific **Core**. Normally, we write the computer name of the site in question where is located the **Core**. This will apply when the computer of the **Broker List** has access to a **Domain Name Server** (DNS). If it is not the case, or if the site computer is part of another domain, then it you can write its IP address.



Tip : It is easy to obtain the computer name on a specific site. Just click on **My Computer**, and choose **Properties** under the tab **Computer Name**.

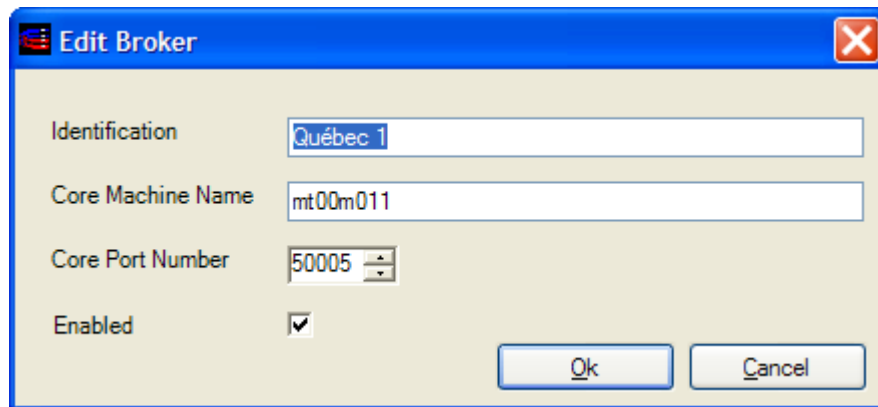
- **Core Port Number:** Select the communication port to allow the **Broker** to contact the **Core** located on a site. The default value is 50005 when the **Core** is installed. The **Core** listens on this port to accept a connection coming from a **Broker**. Rarely this value will have to be modified. If this value has been modified (via the configuration file of the **Core**), you have to enter the modified value here. The fire walls must allow the communication through the ports that are used. For example, using the default values of the **Broker** computer, allow the port 1024 to 5000 to communicate with the site computer through the port 50005. But, since the communication is bidirectional, it is also necessary to allow the site computer, starting from port 50005 to go towards the PC of the **Broker** on the port 1024 to 5000.
- **Enabled:** With this check box you can activate or deactivate the **Broker**. It should be selected if it is not already done. It is recommended to deactivate only if we have a persistent communication problem with a site which was already working.

While clicking on **Ok**, the **Broker List** tries to contact the selected **Core**. If the connection is established, the horizontal striking line will disappear over the Broker name. If the **Broker** is still strike by the horizontal line, several causes are possible:

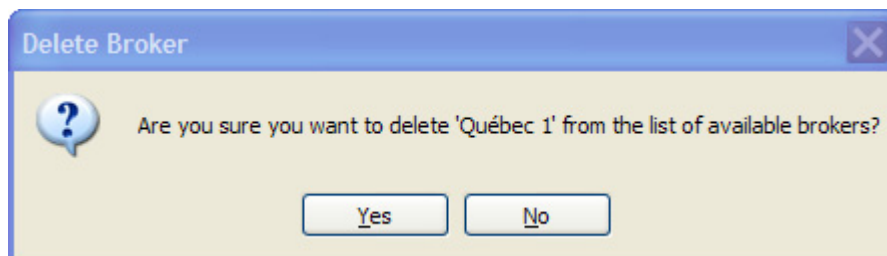
- **Core Machine Name** : wrong IP address, wrong site computer name, or the **Broker List** doesn't have access to the DNS;
- The fire walls between the **Broker** and the **Core** does not permit the communication through the ports selected;
- The **Core** is not in function on the site computer.

The **Event viewer** can be consulted in the control panel for more details. If a communication is tried with a site using version 5.0.x, it is mandatory that the fire walls does not block the **NetBIOS** protocol. If it is not possible, please contact Micro Thermo technical support (an improved **Core** without using **NetBIOS** is available and can be installed on 5.0x sites or a « **workaround** » can be applied to the **Broker List** computer).

2. **Edit**: Allows to modify the configuration of a **Broker**. By clicking on **Edit**, the **Edit Broker** window will appear filled with the data entered previously. This is useful if you are replacing the computer of a site, if you change the port number or if you want to deactivate the **Broker** in case of prolonged problems of communication.

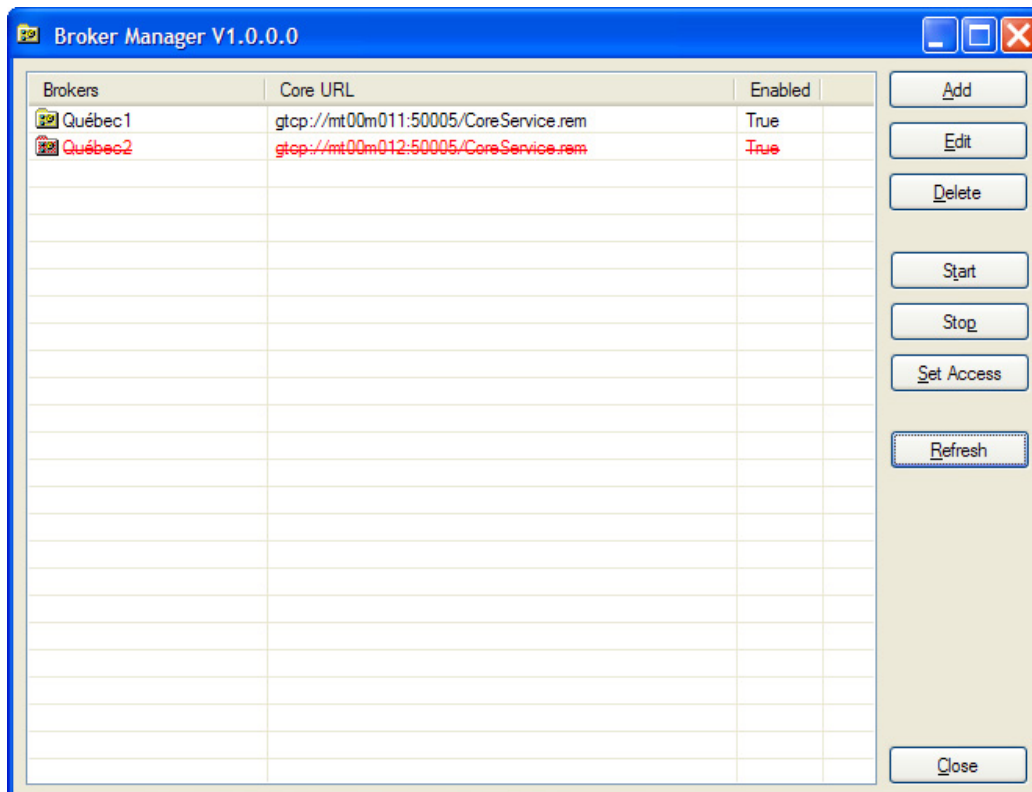


3. **Delete**: When a site does not exist any more, you can remove permanently the **Broker** who corresponds to this site. Choose a **Broker** in the **List** and click **Delete**.



4. **Start:** To start a **Broker** who is presently not active. Choose a **Broker** in the **List**, then click **Start**. The **Broker** tries to contact the **Core** who is associated with. If connection is established successfully, the horizontal striking line will disappear over the **Broker** name. If the **Broker** is still strike by the horizontal line, several causes are possible:
 - **Core Machine Name** : wrong IP address, wrong site computer name, or the **Broker List** doesn't have access to the DNS;
 - The fire walls between the **Broker** and the **Core** does not permit the communication through the ports selected;
 - The **Core** is not in function on the site computer.
5. **Stop:** To stop a **Broker** who is currently active. For example, when we change the name on the site, it is not posted automatically. The **Broker** must be stopped and restarted again, then the new name will be posted. If the **Broker** is not restarted manually, the **Broker List** will restart it automatically. If you have to put a **Broker** out of service for a long period of time, **Stop** should not be used, use the check box 'Enabled' instead.

Here is a view that illustrates the situation: *Québec1* is started and *Québec2* is stopped.



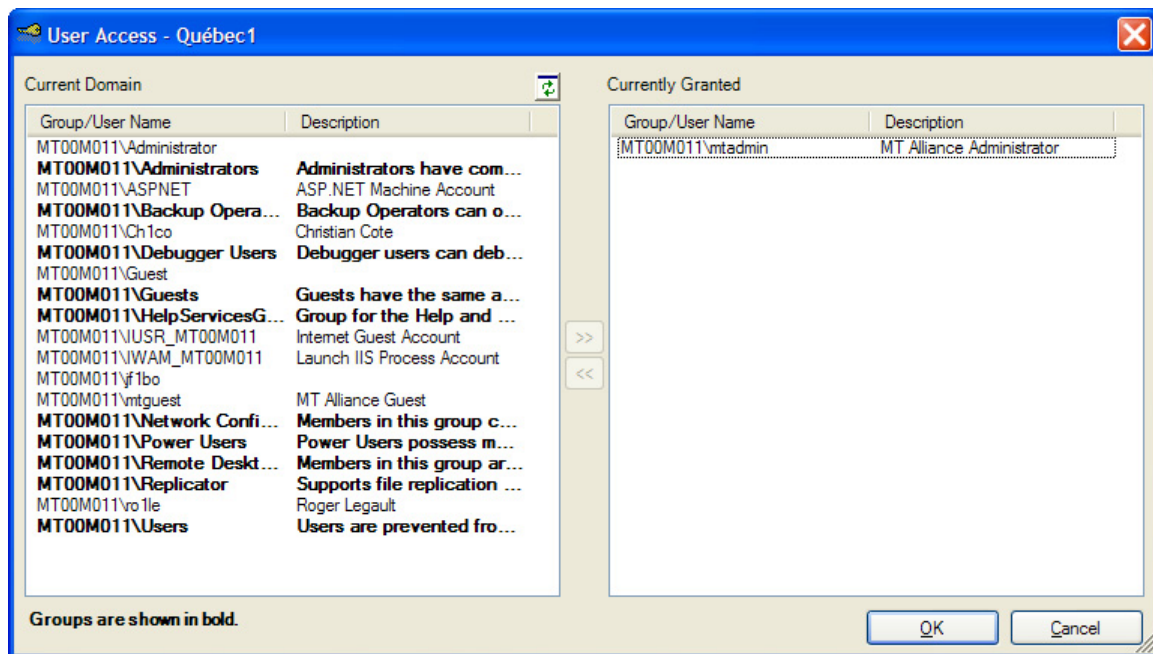
6. **Set Access:** For each **Broker**, it is important to identify the users that will have access. When a **EFM Workstation** connects to the **Broker List**, it must be as a user.

This user is selected here, and later for the **EFM Workstation configuration**. No matter who is using the **EFM Workstation**, the user will identify himself in the form of the same user with the **Broker List**.

Therefore, it is a question of managing which **EFM Workstation** will have access to which site. And indirectly, which user has access to which site. For example, the energy manager should have access to all sites while a refrigeration technician will have access only to the sites of the region that he is responsible for.

It is mandatory to define the access for each **Broker** individually. Fortunately, it is possible to give the access to a group of users. It is simpler to associate a user to a group, than to associate this user to each **Broker** individually. The groups are posted in bold type in the list next page.

The users and the groups can come from two distinct sources: local domain of the machine or from the network domain. LDAP protocol is supported (ex: Microsoft Active Directory). General rule, if the **EFM Workstation** is installed inside the corporative network, it is preferable to use as source the network domain (LDAP). On the other hand, if a **EFM Workstation** is installed outside of the corporate network, you have to use the local domain of the machine (Windows NT).



7. **Refresh:** Allows to refresh the **List** after a verification of the connections between each **Broker** and each **Core**.

4 EFM Workstation

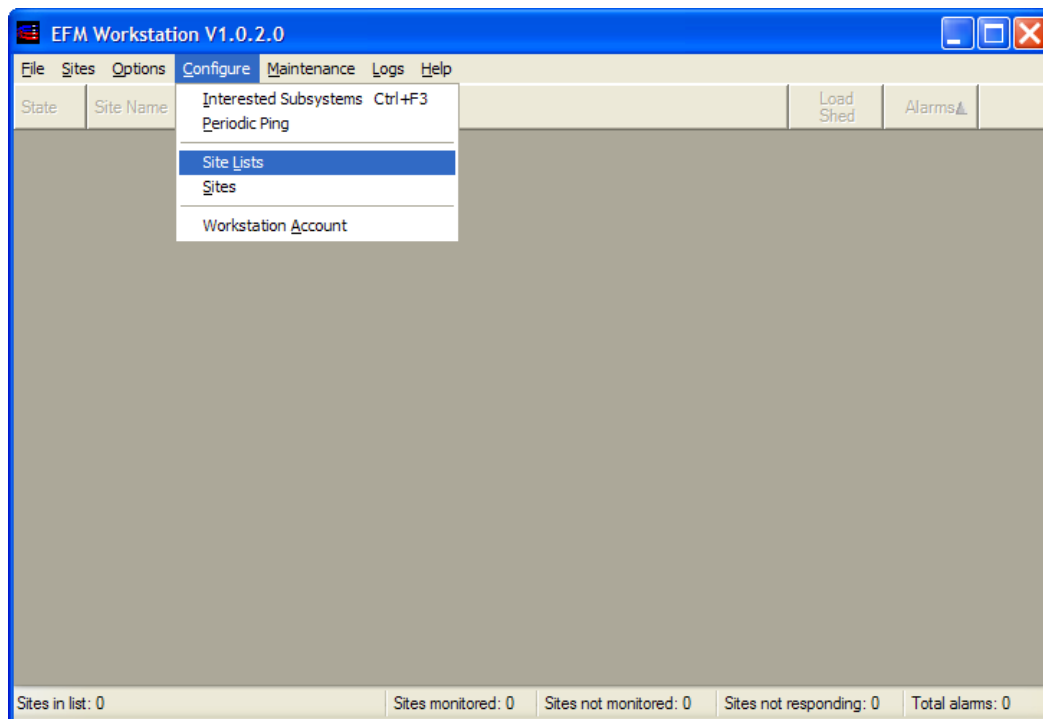
Once the **Broker List** is installed and **Brokers** configured, it is now possible to install and configure the **EFM Workstation**. The **EFM Workstation** is essentially an **Alarm Center** on which we added other functions. Normally, the **EFM Workstation** will be installed in the Maintenance Department since this group is taking care of refrigeration alarms, HVAC alarms etc. Being on the first line of intervention by receiving directly all the stores alarms, the Maintenance Department will be able to reduce the service calls since they will have a remote access to each store to do remote troubleshooting. An additional **EFM Workstation** can be installed on the Energy Manager computer that could be used to follow up the energy performance of each store, and/or to send load shed commands to a group of selected stores for **DR/RTP** Management. An **EFM Workstation** could also be installed on the computer of the Food Safety Officer to follow up on the stores that show continuous case T° problems.

If the Alarm Center function is subcontracted, then the **EFM Workstation** is installed at the Service Company provider on a computer dedicated to this end. If the **EFM Workstation** is located outside of the domain corporate network, it is essential to activate VPN connection.

Please install the software in accordance with the installation instructions.

When the software installation is completed, you can start the **EFM Workstation** located (by default) in:

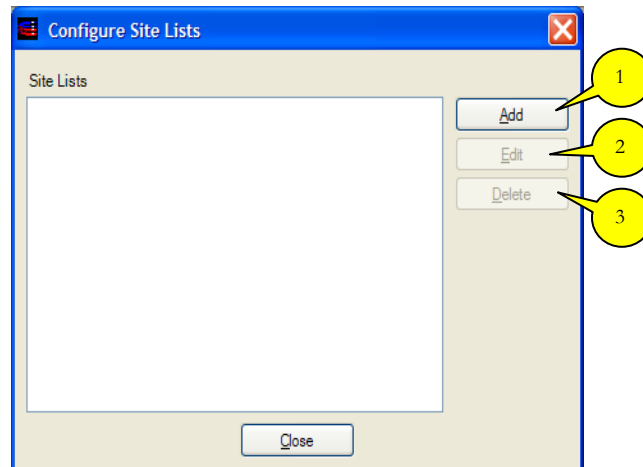
C:\Program Files\Micro Thermo Technologies\EFM Workstation\Workstation.exe



4.1 Configuration of the Site Lists

The first step consists in selecting at least one **Broker List** (called here **Site Lists**).

It is necessary to click on menu item: Configure – **Site Lists**.



- 1) **Add**: Allows adding a **Broker List**. The **EFM Workstation** requires at least one **Broker List** to operate correctly.

Identification: This field is used to identify a **Broker List**. This identification is permanent and is preserved at the **EFM Workstation**. As it is possible for the **EFM Workstation** to connect with several **Broker Lists**, the identification is very useful. The **Broker List** does

not have the 'identification' and will not transmit it automatically to the **EFM Workstation**. Thus, it is possible (but not desirable) that two **EFM Workstation** use the same **Broker List** by using a different identification.

Machine Name: This field identifies the computer where the **Broker List** is located. You can register the computer name of the **Broker List**. This is possible only if the computer of the **EFM Workstation** has access to a DNS. If this is not the case, or if the computer of the **Broker List** is part of another domain network, then you register its IP address.

Port Number: In this field, you write the communication port that the **EFM Workstation** will be using for contacting the **Broker List**. The default value of a **Broker List** is 50006. Since the **Broker List** *listens* on this port to accept a connection coming from an **EFM Workstation**, it is compulsory to put the same selected number as for the one used during the **Broker List** configuration. The firewalls must allow the passage of the ports used. For example, using the default values from the **EFM Workstation** computer, allow the port 1024 to 5000 to pass towards the **Broker List** computer on port 50006. However, since we have a bi- directional communication, it is also necessary to allow the **Broker List** computer, starting from port 50006, to go towards the PC of the **EFM Workstation** on the port 1024 to 5000.

Session Name: It is necessary to enter the same security session name that was defined on the **Broker List** (see section XX Broker List Security Configuration).

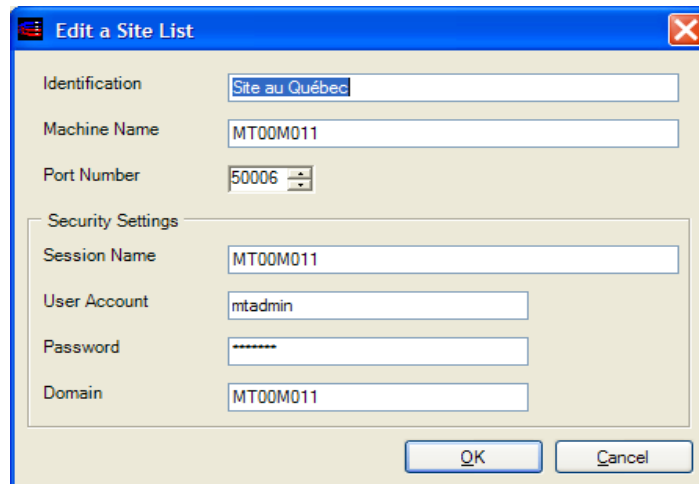
User Account: When an **EFM Workstation** is connecting to a **Broker List**, it must provide an account and a password. When the **Broker List** receives this information, it turns back only the Sites List that is allowed for this particular account (see Section XX, Set Access). It is very important to note that an **EFM Workstation** is associated to an account, no matter who is using it.

Password: Password associated with the account above.

Domain: Register the **domain** in which the account exists. If it is a local account, this field is identical to the computer name where the **Broker List** is located. However, if it is a network account, then it is necessary to enter the name of the domain network.

Immediately after you have saved your parameters, the **EFM Workstation** will try to contact the **Broker List**. If the data you enter is wrong or if the firewalls do not authorize the communication through the designated ports, it will run out from 1 to 2 minutes before it returns to the principal screen. If the window closes without any delay, then information is correct. Please note that it is possible for an **EFM Workstation** to use different accounts for each **Broker List** that it is connecting to.

2) **Edit**: Allows the modification of registered parameters. This is useful if the **Broker List** is moved on another computer, or if the password is changed

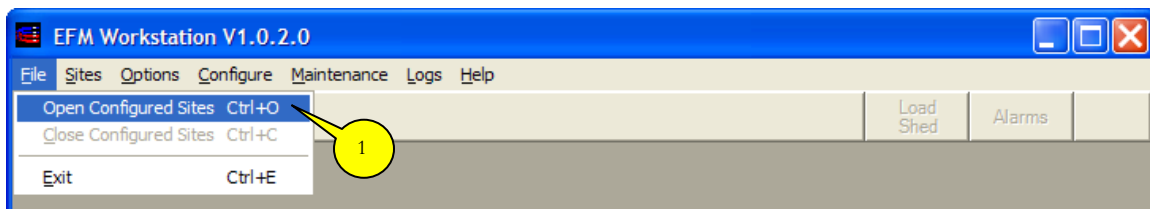


3) **Delete**: Makes it possible to remove in a permanent way a **Broker List** associated with this **EFM Workstation**. This operation should normally be made only if the **Broker List** does not exist any more.

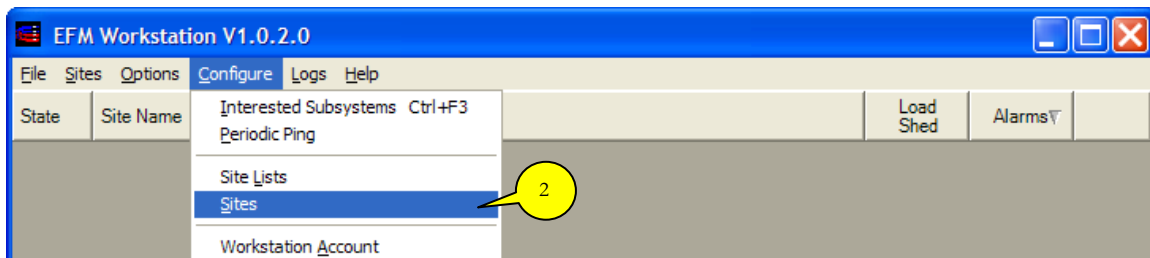
4.2 Opening of the sites

When a **Broker List** is correctly configured, it is then possible to establish the communication with all sites that are attributed to you.

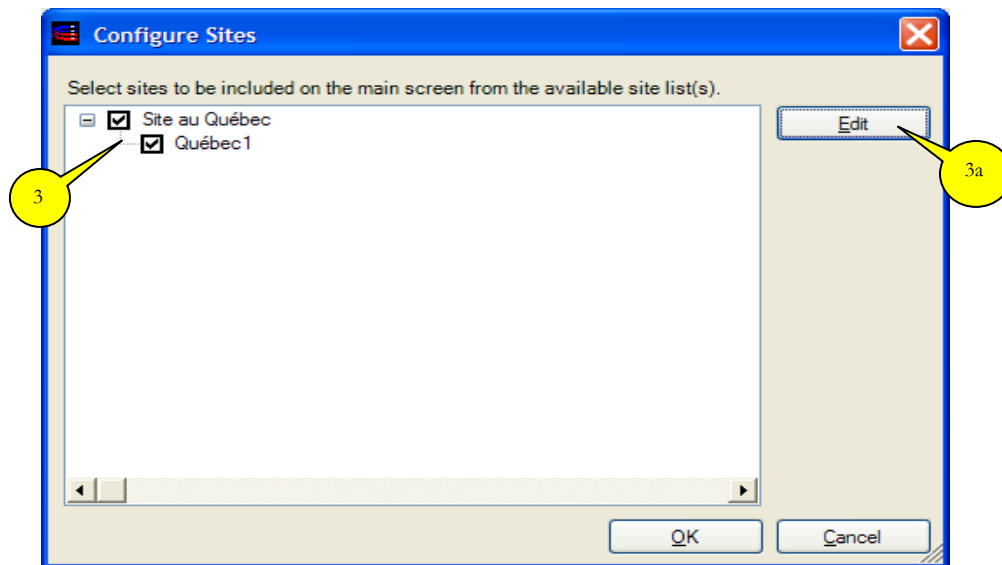
1- To establish the communication with the (or all) **Broker List**, click on menu item **File - Open Configured Sites**.



2- If this is the very first time, you must do an additional step, amongst all the sites that you are allowed to connect to, you have to select the sites for which you have the most interest (this list can enclose all sites). Then click on the menu **Configures - Sites**.

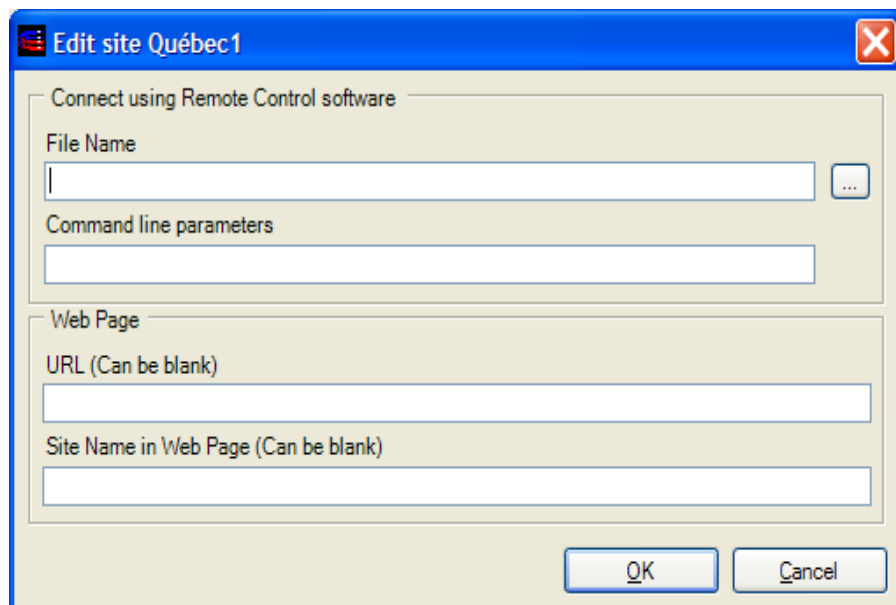


3- The following window appears and lists each **Broker List** correctly configured. Click on "+" at the left of the **Broker List** name to see the list of all sites that are allowed by the account that the **EFM Workstation** is presently using. You can now choose the sites that are of an interest for you by using the check box. You can select all the sites by using the **Broker List** check box.



3a- The **Edit** key:

With this key you can register additional optional parameters for each site. Choose a site in the **List**, and then click on "**Edit**". It is possible to specify which remote control software must be started to contact this site. You can also specify where is located the **Web Page** that gives access to this site.



File Name: This field will start the remote control software, which must be installed on the **EFM Workstation** computer or on the network repertory. **File name** can be an executable or a file that Windows associates automatically to an executable program.

Command line parameters: If **File Name** is an executable program, you can specify an additional parameter to indicate which site to contact.

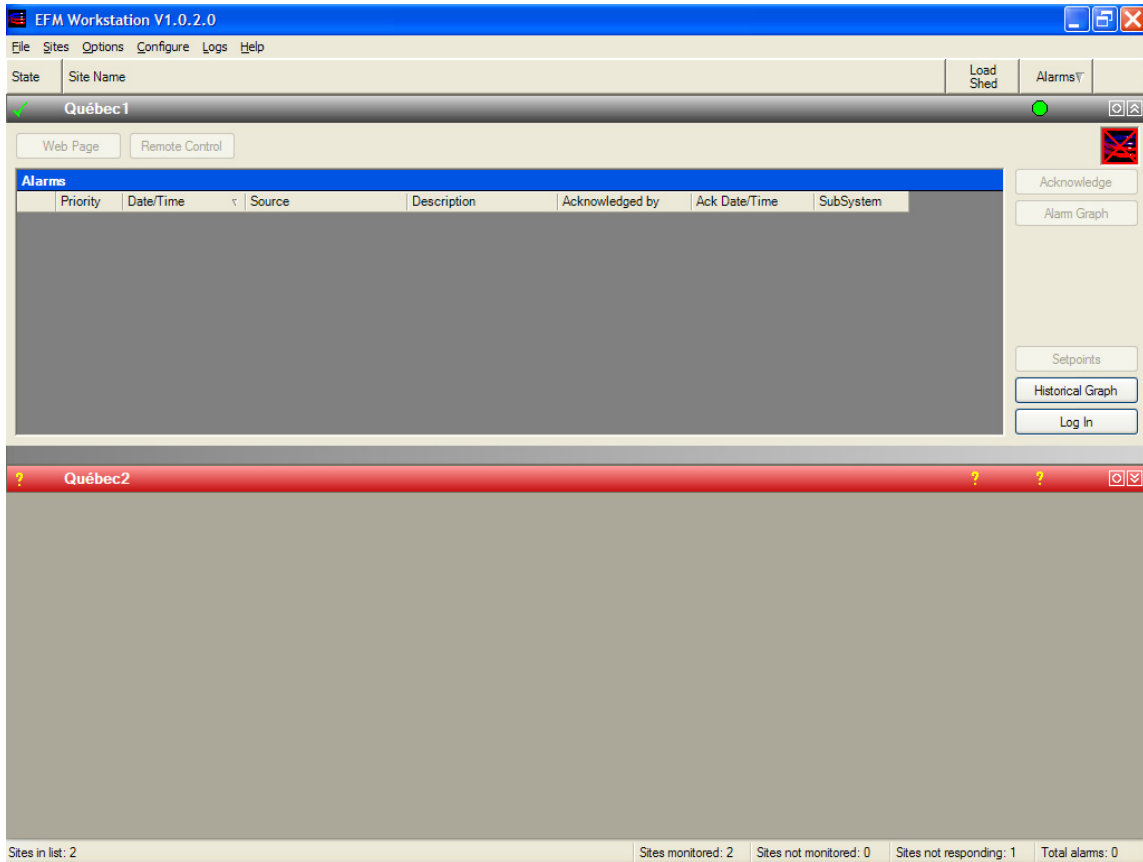
URL: This field indicates where is located the Web server that gives access to this site. The Web page gives you access to functionalities that are not presently available in the **EFM Workstation** (ex: the management of the **Alliance** users). The Web page is usually located at the Corporate Headquarters, on a server dedicated to that end (Ex: <http://computername.yourcompany.com/AllianceWebServicesClient>). The Web page can also be located on the computer of the site. We can also specify an IP address instead of the computer name.

Site Name in Web Page: When we access the Web page, the first screen contains a list of all sites that can be reached. To override this page, and to reach a site directly, you must fill the name of the site exactly as it appears in the first screen of the Web page.

When you close the window **Configure Sites**, the **EFM Workstation** will try to connect to each selected site.

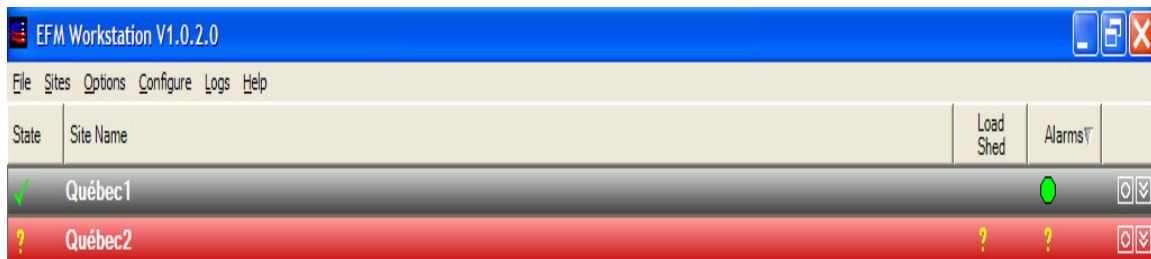
4.3 Functionalities and menus of the EFM

The principal window posts the **List** of all sites that are configured. Each horizontal bar represents a site.



The following section presents the various functionalities of the **EFM interface** for a particular site.

First, here is the color convention and the meaning of the different icons used in the **EFM interface**.



State: Symbol representing the state of the site. The possible values are enumerated below. You can sort the sites depending on their state value while clicking on "**State**" in the heading of the column. If you click another time, the sorting is reversed. If you have several hundreds sites, you can find this way instantaneously which sites are in problem.

	The site is accessible by the EFM but MT Alliance is not in function at this moment. This is normal if someone is on site and making a backup copy or is in the refrigeration configuration tool. In this state, the historical collection of data is not functional.
	The site is not at this moment under the monitoring of the EFM Workstation . The EFM Workstation does not try to communicate with this site. Usually, this situation will occur if a site is in repair. To restore the monitoring, select the short cut menu of the site () and select Connect .
	The site is not accessible by the EFM Workstation at this moment. There are several causes to this problem (network connection, PC problems, server problem, etc). Click on the key ' details ' to see the possible causes ()
	The site is accessible by the EFM Workstation and MT Alliance is in function

Site Name: Each horizontal bar posts the name of a specific site. If in one of the bar there is no name, it is compulsory to write the site name into the PC of this site. You can also sort the sites according to their name while clicking on "**Site Name**" in the heading of the column. If you click another time, the sorting is reversed.

Load Shed: Indicates (when applicable) the load shedding level for this site. The *lightning* symbol indicates that the store is at this moment in load shedding mode. The *number* indicates the current load shedding level. You can sort the sites according to their current load shedding level while clicking on "**Load Shed**" in the heading of the column. If you click another time, the sorting is reversed.

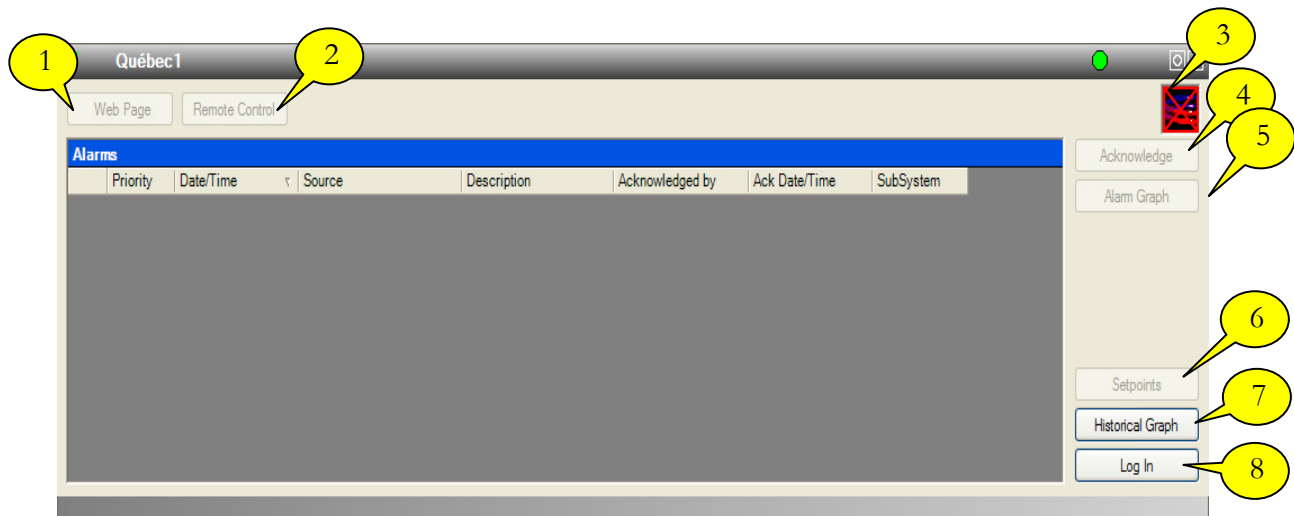
	There is currently no load shedding on this site or there is no energy node installed.
	The current level of load shedding for this site is 3.

Alarms: Indicates the state and the number of active alarms on the site. You can sort the sites according to their number of active alarms while clicking on "**Alarms**" in the heading of the column. If you click another time, the sorting is reversed.

	There is presently no alarm on the site.
	There is presently 1 active alarm on this site (alarm that has not been acknowledged).

Menu and Details: On the right hand side of each horizontal bar, you will find 2 keys. Their possible actions are listed below:

	Allows to post the <i>pop-up</i> menu for the selected site: Connect Disconnect Ping Now Web Page Remote Control Connect: To establish a connection with the site. Disconnect: To close connection with the site. Ping Now: To check the connection with the site right away. Web Page: To access the Web page of the site. Remote Control: To take control of the site remotely (Carbon Copy, PC Anywhere, Microsoft Remote Desktop, etc).
	Allows closing the window of the details of a site (without loosing connection).
	Allows to open the window of the details of a site (see below)



- 1- **Web page:** Key allowing access to the Web page of the site. (Identical to the pop-up menu)
- 2- **Remote Control:** Key that allows to take control of the site remotely. (Identical to the pop-up menu)

- 3- **Alliance Status:** Icon representing the **MT Alliance** status of this site

	Alliance is in function at this moment on this site.
	Alliance is not in function presently on this site. Please note that even if Alliance is not in function, the access to the historical data via the EFM Workstation (and the Web page) remains functional.

- 4- **Acknowledge:** Allows to see the details of a particular alarm and to acknowledge this alarm from the **EFM Workstation**. Choose an alarm in the **List** then click on **Acknowledge**. For this, you must have an account and a valid password for the site in question with the permission to acknowledge alarms. Before acknowledging an alarm, you should fill the **Note Type** and write into the **Note** the actions taken. It is also possible to acknowledge multiple alarms in only one action.

Acknowledge

Details

Event Type: Alarm

Priority: Medium

Date / Time: 2005-07-12 01:43:12

Sensor: Room 217 - Stephane Rivest, Room Temperature

Event Description: Temperature too low

View: Main

Subsystem: HVAC

Acknowledge Alarm

Note Type: Problem fixed.

Note: This was caused by faulty grounds.

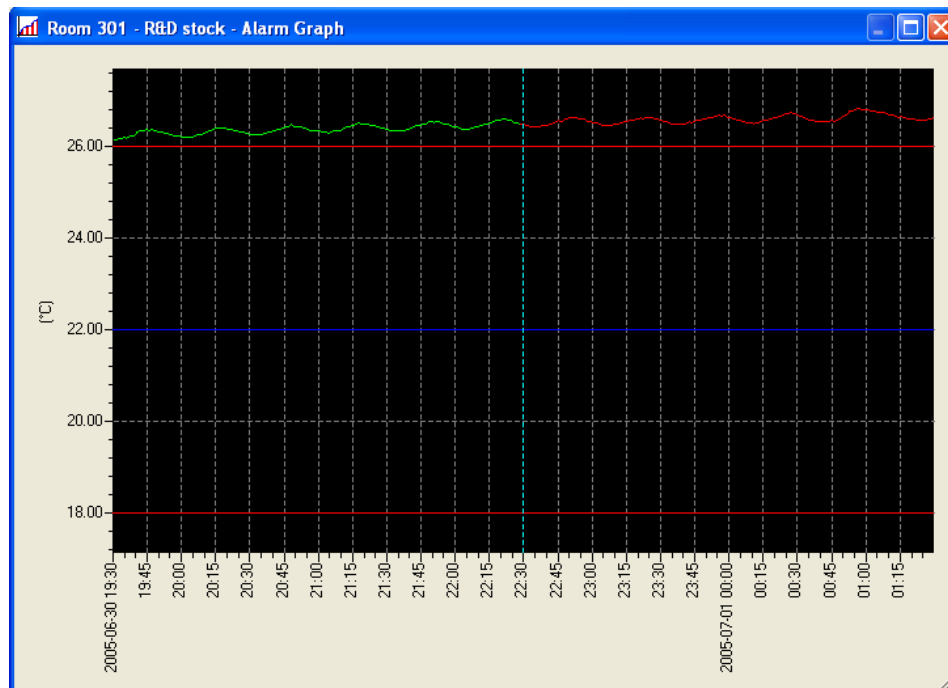
Account: jo1sa

Password: xxxxxxxxxxxx

☐ Acknowledge all HVAC alarms

OK Cancel

- 5- **Alarm Graph:** Allows the posting of the trend graph of the point/sensor in alarm. To help the **EFM** user in the alarm analysis/troubleshooting, the trend graph will display 6 hours of data distributed before and after the moment when occurred the alarm



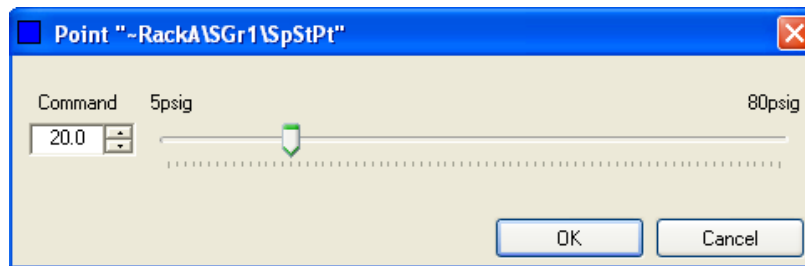
- 6- **Setpoints:** Allows changing any setpoints available in **Alliance**. You must have a valid account on this site and have permission to change a setpoint.

Setpoints

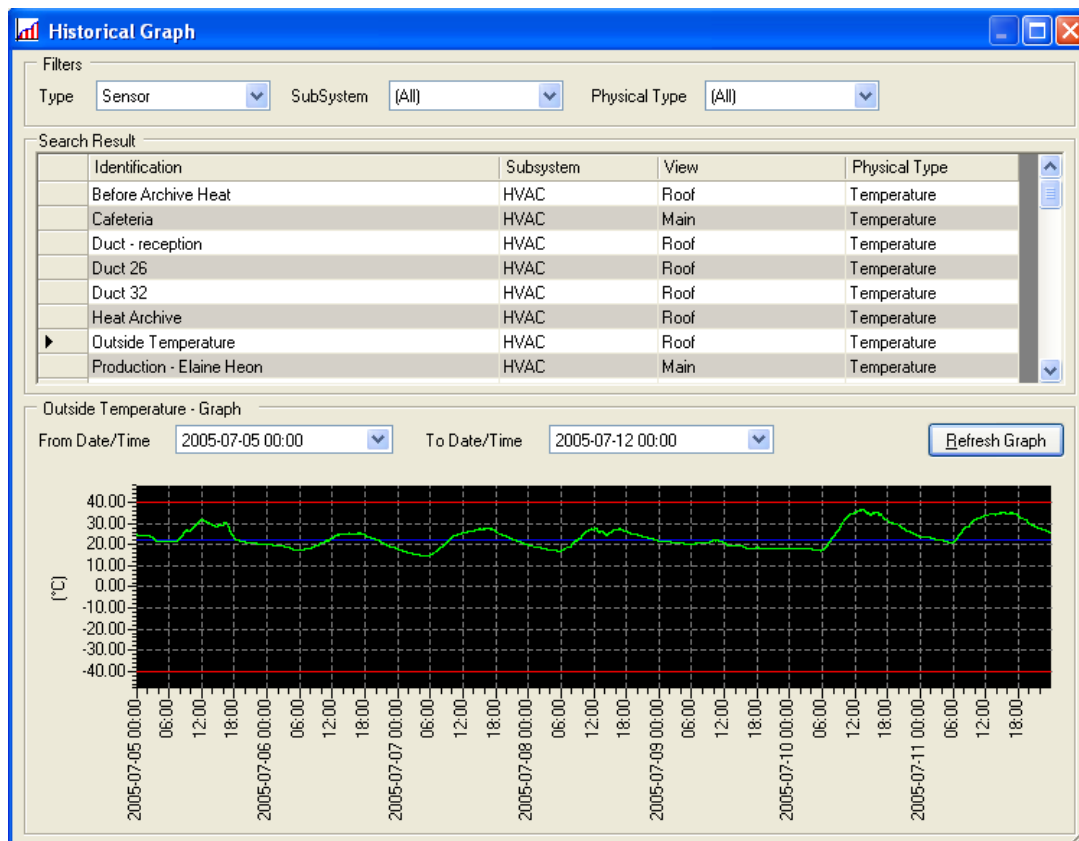
Filters
 SubSystem: [All] Physical Type: [All] Change Set Point

Setpoint List					
	Identification	Subsystem	View	Physical Type	Type
	~RackA\Cnd\DpStPt	Refrigeration	~RackA	Press Med Range	Command
▶	~RackA\SGr1\SpStPt	Refrigeration	~RackA	Press Med Range	Command

Choose a setpoint in the List and click on « **Change Setpoint** ». The actual setpoint will be posted using the current range configuration of the site.



- 7- **Historical Graph:** Allows the posting of the trend graph of historical data of any sensor or setpoint available in **Alliance**. The maximum period of time covered by the posted trend graph is 7 days. You can move as far back as the historical data will permit (typically 3 years). For each point/sensor of a site, **Alliance** will log the data at each minute. The resulting graphs are therefore very precise.



- 8- **Log in:** Normally, the **EFM Workstation** automatically provides the account and the password specified by default. It is possible to change this for a specific site. Once the window for the details of a site is activated, the key « **log in** » allows you to specify an account and a password to be used for this site. This will allow you to acknowledge alarms and to change setpoints. This change is temporary until your working session on the **EFM Workstation** ends. This function is useful only if your account of the

EFM Workstation (Configure – Workstation account) is valid on the majority of the sites but does not exist on few sites.

- 9- **Alarms:** Allows posting the list of active alarms on a site as well as the alarms that have been acknowledged since the early moment the **EFM Workstation** was turned on. The **EFM Workstation** does not keep the list of acknowledged alarms on its hard drive. The acknowledge alarms (items in white on the interface) will be erased if the **EFM Workstation** is turned off. This **List** is practically identical to the one found in **Alliance** on each site. It is a little more powerful than the one in **Alliance** because it is possible to do sorting (ascending/descending) for the majority of the fields. The **EFM Workstation** remembers sorting for each site until the **EFM Workstation** is turned off.

Alarms							
	Priority	Date/Time	Source	Description	Acknowledged by	Ack Date/Time	SubSystem
	Medium	12/20/2005 14:21:41	sen1	Temperature too high			Refrigeration
▶	Medium	12/20/2005 14:20:34	sen1	Temperature too high	Jean-Francois Boivin	12/20/2005 14:20:44	Refrigeration

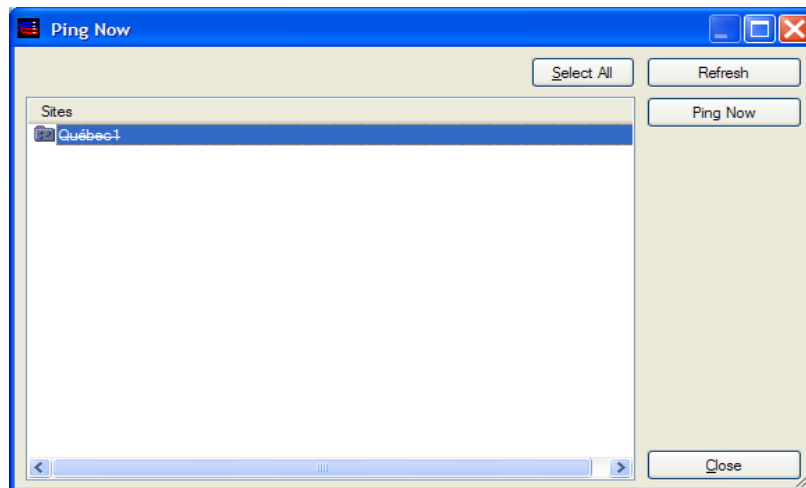
4.4 Explanations of the menus

File:	Open Configured Sites	Ctrl+O
	Close Configured Sites	Ctrl+C
	Exit	Ctrl+E

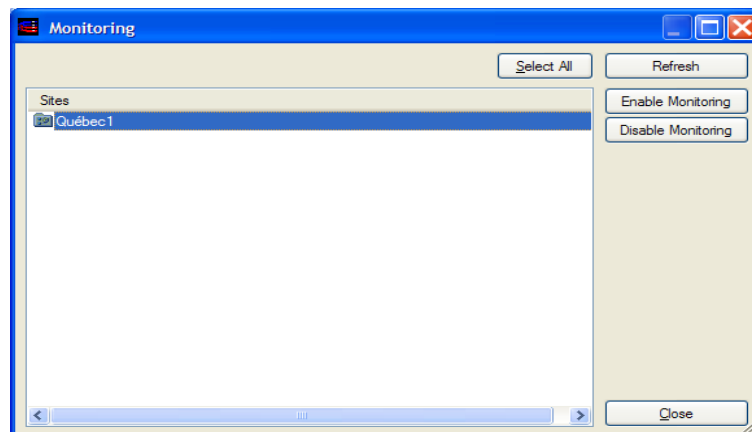
Open Configured Sites	Allows establishing a connexion with all selected sites.
Close Configured Sites	Allows closing connection with all selected sites.
Exit	Allows closing the EFM Workstation .

Site :	Ping now
	Monitoring
	Load Shedding

Ping now: Allows checking the connection between the **EFM Workstation** and all selected sites.

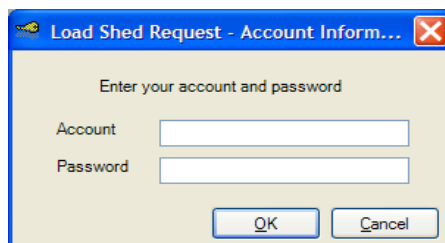


Monitoring: Allows deactivating, individually or by multiple selections, selected sites.



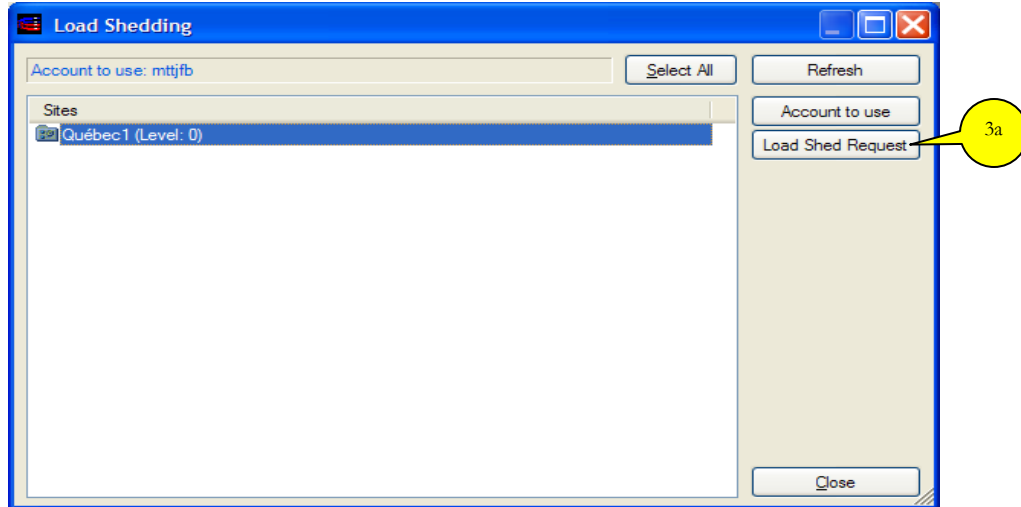
Load Shedding: Allows making a request to send a corporate load shedding command (**clsc**) to all sites that have been configured to receive **clsc**.

It is compulsory to specify the right account and password to be used before sending the request for load shedding. If the account is not valid or does not have the required permission on a site, the request will not be carried out on this site.

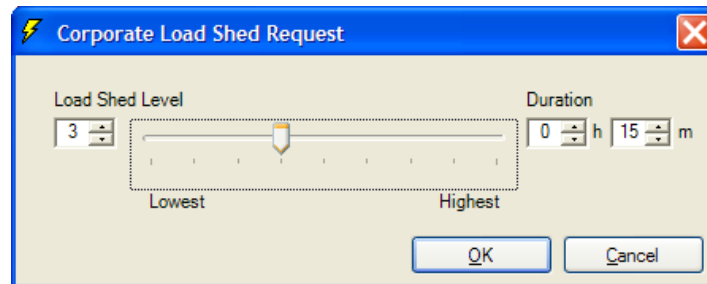


Then the site lists where the selected account is valid for the **clsc** is refreshed. The sites marked by an horizontal bar indicates that they do not support the selected account.

Select one or more sites then click on the key **Load Shed Request**



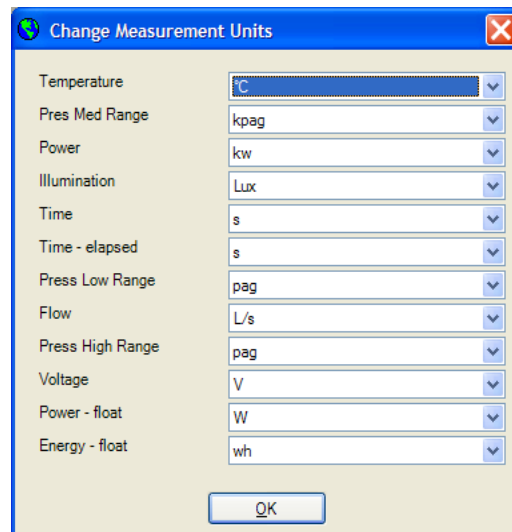
3a – Corporate Load shed Request



Enter the desired load shedding level and the time duration of the load shedding command, and then click on **OK**. The sites which do not conform to the request, probably do not have Energy Management installed. Or, a load shedding mode with an higher priority than the corporative command is activated. For example, when a site is using an emergency generator and it is on (local power failure), the load shedding corporate command is ignored instead for a more suitable local strategy.

Options : Change Measurements Units Ctrl+F2

Change Measurement Units: Allows changing Units of the physical units supported by Alliance. (Ex: for temperature: Celsius or Fahrenheit). This change will not affect the measurement units on sites, this is only for the preferential posting for the **EFM Workstation**.

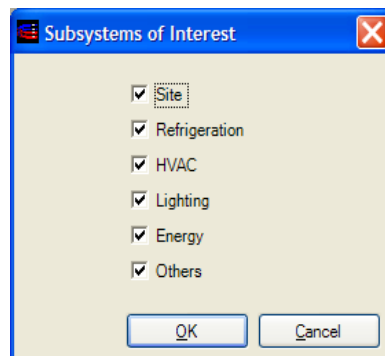


Configure : Interested Subsystems Ctrl+F3
Periodic Ping

Site Lists
Sites

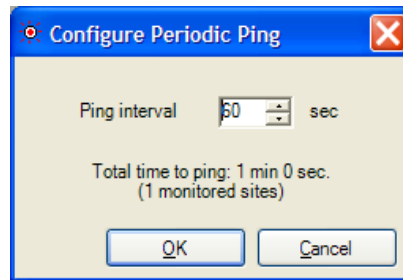
Workstation Account

Subsystems of Interest: Allows filtering alarms by subsystem. For example, the Food Safety Officer will select only refrigeration alarms. The Energy Manager will select only energy alarms, while the Maintenance Manager will select alarms coming from all subsystems. The **EFM** user can change the filter any time.

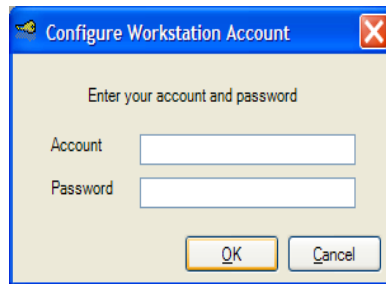


Periodic Ping: The **EFM Workstation** continuously supervises the status of all sites that are part of its List. When the computer of a site is turned off in an abnormal way, the **EFM**

Workstation will detect it and will indicate it. The same way, when the computer of a site is rebooted it will be detected and posted by the **EFM Workstation**. This parameter makes it possible to control the interval period for site testing.



WorkStation Account: If you are the only person to use the **EFM** on this working station, enter your account and valid password. If two persons or more are using the same **EFM Workstation**, it would be well advised to modify the **Workstation Account** at the beginning of the new quarter of work. The main goal of the **Account** is to simplify the work of alarms acknowledgement on a hundreds sites configuration. Moreover, you should secure your computer using a screen saver protected by a password.



Logs: Workstation Log

WorkStation Log: Allows posting a log on the **EFM Workstation** communication problems. The **WorkStation Log** should be used only by network specialists (Network administrators and technical support from Micro Thermo).

The screenshot shows a window titled "Workstation Log" with a blue title bar. Below the title bar, there are two date pickers labeled "From" and "To", both set to "12/14/2005". To the right of these are three buttons: "Refresh", "Details", and "Clear Log". Below this is a table with the following columns: "Date/Time", "Description", "Custom Description", and "Location". The table contains 15 rows of log entries. The first row is highlighted in blue. The last row is partially obscured by a grey bar. Below the table is a scroll bar and a "Close" button.

Date/Time	Description	Custom Description	Location
12/15/2005 8:53 A	N/A	(EFM)Genuine Channels Event H	N/A
12/15/2005 8:53 A	N/A	(EFM)Genuine Channels Event H	N/A
12/15/2005 8:53 A	Object reference not set to an instance	(EFM Workstation) Genuine Chan	GenuineChanr
12/15/2005 8:43 A	N/A	(EFM)Genuine Channels Event H	N/A
12/14/2005 4:24 P	N/A	(EFM)Genuine Channels Event H	N/A
12/14/2005 3:29 P	N/A	(EFM)Genuine Channels Event H	N/A
12/14/2005 3:29 P	Object reference not set to an instance	(EFM Workstation) Genuine Chan	GenuineChanr
12/14/2005 3:29 P	N/A	(EFM)Genuine Channels Event H	N/A
12/14/2005 2:53 P	N/A	(EFM)Genuine Channels Event H	N/A
12/14/2005 2:47 P	N/A	(EFM)Genuine Channels Event H	N/A
12/14/2005 2:47 P	N/A	(EFM)Genuine Channels Event H	N/A
12/14/2005 2:46 P	N/A	(EFM)Genuine Channels Event H	N/A
12/14/2005 2:43 P	N/A	(EFM)Genuine Channels Event H	N/A

5 Revision History

REV	Description	Revised by	Date
1.0	Version obtained from document 75-MTA-1019-R0.7 translation	CP	26-july-06
1.6	Final translation for the EFM part.	CP	04-august-06
1.7	Revision for the EFM part with André Hébert.	CP & AH	18-august-06
1.8	Revision for the Broker List part with André Hébert.	CP & AH	24-august-06
1.9	Publication of a temporary version	CP	01-nov-06
1.91	Corp Logo changed	RL	2-sept-11
1.92	Cover page	ER	24-Feb-2015